

WHAT IS CLAIMED IS:

1. A portable terminal equipped with a display unit, the portable terminal comprising:
 - a DC/DC converter for supplying power to the display unit;
 - a frequency switching unit for selectively switching and supplying one of a plurality of switching clock frequencies to the DC/DC converter; and
 - a display mode detecting unit for detecting that the display unit has been switched to a predetermined low-power consumption mode, determining one of the plurality of switching clock frequencies according to power consumption reduced in the predetermined low-power consumption mode based on this detection, and instructing the frequency switching unit to execute this selective switching.

2. The portable terminal according to Claim 1, wherein

the display mode detecting unit determines lower one of the plurality of switching clock frequencies, when the display unit has been switched to a lower-power consumption mode.

3. A method of reducing power consumption of a portable terminal equipped with a display unit to which power is supplied from a DC/DC converter, the method comprising the steps of:

monitoring the display unit to see whether the display unit is in a display color number limiting mode or not;

determining a switching clock frequency of the DC/DC converter according to power consumption reduced by a reduction in the number of display colors, when the display color number limiting mode has been detected; and

switching the frequency to the determined switching clock frequency, and operating the DC/DC converter at this frequency.

4. A method of reducing power consumption of a portable terminal equipped with a display unit to which power is supplied from a DC/DC converter, the method comprising the steps of:

5 monitoring the display unit to see whether the display unit is in a partial display mode or not;

determining a switching clock frequency of the DC/DC converter according to power consumption reduced by a reduction in a display area, when the 10 partial display mode has been detected; and

switching the frequency to the determined switching clock frequency, and operating the DC/DC converter in this frequency.

5. The portable terminal according to Claim 1 or 15 2, wherein

the display unit is an LCD display unit.

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